

**EXHIBIT 14 Government Labor Category Descriptions**  
**NNG13454034R**

POSITION	DEFINITION	EDUCATION	EXPERIENCE
<b>Support Scientist IV</b>	Is required to work with NASA scientists and engineers and Contractor staff to plan and implement the Contractor services for assigned tasks. This is task dependent and may include computational model development, instrument development, analysis of large satellite datasets, or the development of new instrumental concepts. Interacts with scientists from other institutions and presents scientific data at conferences, workshops and in peer-reviewed publications. Oversees and manages other support scientists within the tasks.	A Ph.D. degree, or equivalent*, in an atmospheric or physical science, mathematics or computer science	15 years of scientific experience, including five years as a scientific lead. Excellent communication skills are required; must have a broad knowledge of atmospheric, hydrospheric, biospheric or physical science with a proven record of publication in peer-reviewed scientific journals; Significant experience in scientific programming is required using languages such as FORTRAN, C or C++; proficiency in IDL/ENVI or other image processing or GIS package, Perl or shell-based scripts and UNIX or Linux is required. Experience designing and maintaining relational databases may be required for specific tasks.
<b>Support Scientist III</b>	Assists Contractor and NASA scientists and engineers in the planning and coordination of the research efforts in a task and provides scientific or technical leadership in the conduct of the research - this can include model or instrument development or data analysis support, or in the operational support of developed instrumentation; operational support can be at GSFC or during field missions. Communicates results in scientific meetings and workshops, and in peer-reviewed publications	A Ph.D. degree, or equivalent*, in an atmospheric or physical science, mathematics or computer science	10 years of atmospheric, hydrospheric, biospheric or physical science experience; a record of publications in peer-reviewed scientific journals; excellent communication skills; knowledge and experience in scientific programming is required using languages such as FORTRAN, UNIX, C, C++; knowledge of IDL/ENVI or other image processing or GIS packages, Perl or shell-based scripts and UNIX or Linux is required. Experience designing and maintaining relational databases may be required for specific tasks.
<b>Support Scientist II</b>	Assists NASA scientists and engineers in the research and development of the task - this can include model or instrument development or data analysis support, or in the operational support of developed instrumentation; operational support can be at GSFC or during field missions. Provides scientific expertise on one or more areas of science supported by the Contract. Communicates results in scientific meetings and workshops, and in peer-reviewed publications	M.S. degree, or equivalent**, in an atmospheric or physical science, mathematics or computer science	5 years of atmospheric, hydrospheric, biospheric or physical science experience; a record of publications in peer-reviewed scientific journals; good communication skills; knowledge and experience in scientific programming is required using languages such as FORTRAN, C or C++; knowledge of IDL/ENVI or other image processing or GIS packages, Perl or shell-based scripts and UNIX or Linux is highly desirable. Experience with SQL may be required for specific tasks.
<b>Support Scientist</b>	Assists NASA scientists in the research and development of the task - this can include model or instrument development or data analysis support, or in the operational support of developed instrumentation at GSFC or during field missions. Provides scientific expertise on at least one area of science supported by the Contract. Assists in the preparation of presentations for scientific meetings and workshops, and for articles in peer-reviewed scientific journals.	M.S. degree, or equivalent**, in an atmospheric, hydrospheric, biospheric or physical science, mathematics or computer science	Has presented results of research at conferences is desirable; good communication skills; knowledge and experience in scientific programming is required. Knowledge of languages such as FORTRAN, C or C++; knowledge of IDL/ENVI or other image processing or GIS packages, and Perl or shell-based scripts and UNIX or Linux is highly desirable.

<b>Programmer Analyst IV</b>	Works closely with Contractor and NASA scientists to provide technical leadership in the development of scientific software and algorithms for the acquisition, processing, or analysis of data from orbital or sub-orbital instrumentation, or for the development of predictive computational models, and for the documentation of developed software. Oversees other Programmer Analysts within the tasks. Contributes to the presentation of scientific results at scientific meetings and workshops, and in peer-reviewed journals.	M.S. degree, or equivalent**, in atmospheric science, a physical science, mathematics, or computer science	15 years of experience in scientific programming and data analysis, with five years in a leadership role. Must have a broad understanding of one or more of the earth science areas within the Contract; Significant experience in scientific programming in is required using languages such as FORTRAN, C or C++; demonstrated proficiency in one or more of the following: IDL/ENVI or other image processing package, ArcGIS, and Perl or shell-based scripts is required. Experience designing and maintaining relational databases may be required for specific tasks.
<b>Programmer Analyst III</b>	Works closely with Contractor and NASA scientists to provide technical support in the development of scientific software and algorithms for the processing, or analysis of data from orbital or sub-orbital instrumentation, or for the development of predictive computational models, and for the documentation of developed software. Contributes to the presentation of scientific results at scientific meetings and workshops, and in peer-reviewed scientific journals.	M.S. degree, or equivalent**, in atmospheric science, a physical science, mathematics, meteorology or computer science	10 years of experience in scientific programming and data analysis. Must have a broad understanding of one or more of earth science areas within the Contract; Significant experience in scientific programming in is required using languages such as FORTRAN, C or C++; demonstrated proficiency in one or more of the following: IDL/ENVI or other image processing package, ArcGIS, and Perl or shell-based scripts is required. Experience designing and maintaining relational databases may be required for specific tasks.
<b>Programmer Analyst II</b>	Supports NASA scientiststo provide technical support in the development of scientific software and algorithms for the processing, or analysis of data from orbital or sub-orbital instrumentation, or for the development of predictive computational models, and for the documentation of developed software. Assists and contributes to the presentation of scientific data at conferences or workshops, and in peer-reviewed scientific journals.	M.S. degree, or equivalent**, in atmospheric science, a physical science, mathematics, or computer science	5 years of experience in scientific programming and data analysis. Must have a broad understanding of one or more of earth science areas within the Contract; Experience in scientific programming using languages such as FORTRAN, C or C++ is required; demonstrated proficiency in one or more of the following: IDL/ENVI or other image processing package, ArcGIS, and Perl or shell-based scripts is required.
<b>Programmer Analyst</b>	Supports scientists and programming staff in the development of scientific code, and in the processing and display of model or experimental datasets.	B.S. degree, or equivalent**, in atmospheric science, a physical science, mathematics, or computer science	Must have an understanding of computer science or one of the earth science areas within the Contract; Academic or job-related experience writing software in FORTRAN, C, Java, or C++ is required; demonstrated proficiency in one or more of the following analysis tools: IDL/ENVI or other image processing package, ArcGIS, and Perl or shell-based scripts.

**EXHIBIT 14 Government Labor Category Descriptions**  
**NNG13454034R**

<b>Programmer IV</b>	Supports scientific programming activities: to improve or add science products to global, regional or aircraft processing systems; to improve data acquisition routines; to improve the visualization of data products; and to maintain and enhance data systems that process, archive and distribute global or regional products produced from instruments on satellite or aircraft platforms. Works closely with NASA scientists, and Contractor programming staff. Mentors junior programming staff.	B.S. degree, or equivalent***, in a physical science, atmospheric science, mathematics or computer science	15 years of experience in scientific programming in FORTRAN, C or C++. Perl or shell-based scripts and UNIX or Linux is highly desirable; as is knowledge in an area of science supported within the Contract. For tasks involving data systems built around a relational database, proficiency designing and tuning relational databases and writing queries in SQL is required.
<b>Programmer III</b>	Supports scientific programming activities to improve or add data products to ; to improve data acquisition routines; to improve the visualization of data products. Works closely with NASA scientists, and Contractor programming staff. Mentors junior programming staff.	B.S. degree, or equivalent***, in a physical science, atmospheric science, mathematics or computer science	10 years of experience in scientific programming in FORTRAN, C or C++. Perl or shell-based scripts and UNIX or Linux is highly desirable; as is knowledge in an area of science supported within the Contract. For tasks involving data systems built around a relational database, experience designing or tuning relational databases and writing queries in SQL is highly desirable.
<b>Programmer II</b>	Supports scientific programming activities to improve or add data products; to improve data acquisition routines; to improve the visualization of data products. Works closely with NASA scientists, and Contractor programming staff.	B.S. degree, or equivalent***, in a physical science, atmospheric science, mathematics or computer science	5 years of experience in scientific programming in FORTRAN, C or C++. Perl or shell-based scripts and UNIX or Linux is highly desirable; as is knowledge in an area of science supported within the Contract. For tasks involving data systems knowledge of SQL is desirable.
<b>Programmer</b>	Supports scientific programming activities to improve or add data products; to improve data acquisition routines; to improve the visualization of data products. Works closely with NASA scientists, and Contractor programming staff.	B.S. degree, or equivalent***, in a physical science, atmospheric science, mathematics or computer science	Academic experience in scientific programming is required using languages such as FORTRAN, Java, C or C++. Knowledge in an area of science supported within the Contract is desirable.
<b>Instrument Engineer IV</b>	Works closely with the NASA Project scientist and contractor engineers in the planning, design and fabrication of new instruments for atmospheric measurements for a variety of platforms. Plans, designs and implements the interfaces, electronic, mechanical, and software , between the instrument and the platform; oversees the integration of the instrumentation to the platform. Operations of instrumentation may be at GSFC or in the field during missions. Oversees and manages other instrument engineers on the tasks. Responsible for the documentation of all designs and drawings related to the instruments.	Bachelor's degree in physics, Optics, or electrical, mechanical, or optical engineering.	15 years of experience in instrument design; at least five years as an engineering lead. must have a broad understanding of the principles of mechanical, optical and electronic instrument design particularly with respect to measurements from orbital or sub-orbital platforms; must be highly proficient in LabVIEW as applied to data acquisition programming. Proficiency in the design and building of flight hardware is highly desirable.

<b>Instrument Engineer III</b>	Works closely with the NASA Project scientist and contractor engineers in the planning, design and fabrication of new instruments for atmospheric measurements for a variety of platforms. Plans, designs and implements the electronic, mechanical, and software interfaces between the instrument and the platform. Participates in the integration of instrumentation to the platform. Responsible for the documentation of designs and drawings related to the instruments.	Bachelor's degree in physics, Optics, or electrical, mechanical, or optical engineering.	10 years of experience in instrument design; must have a broad understanding of the principles of mechanical, optical and electronic instrument design particularly with respect to measurements from orbital or sub-orbital platforms; must be highly proficient in LabVIEW as applied to data acquisition programming. Proficiency in design and building of flight hardware is desirable.
<b>Instrument Engineer II</b>	Supports NASA Project scientist and contractor engineers in the design and fabrication of new instruments for atmospheric measurements from a variety of platforms. Participates in the electronic, mechanical, and software integration of the instrument to the platform. Supports the planning and design of electronic, mechanical, and software interfaces between the instrument and the platform. Responsible for the documentation of designs and drawings related to the instruments.	Bachelor's degree in physics, Optics, or electrical, mechanical, or optical engineering.	5 years of experience; must have a broad understanding of the principles of mechanical, optical and electronic instrument design particularly with respect to measurements from orbital or sub-orbital platforms; must be proficient in LabVIEW as applied to data acquisition programming. Proficiency in flight hardware assembly techniques desirable.
<b>Instrument Engineer</b>	Supports the NASA Project scientist and contractor engineers in the fabrication of new instruments for atmospheric measurements for a variety of platforms. Supports the planning and design of electronic, mechanical, and software interfaces between the instrument and the platform.	Bachelor's degree in physics, Optics, or electrical, mechanical, or optical engineering.	Must have an understanding of the principles of instrument design particularly with respect to measurements from orbital or sub-orbital platforms; must have a knowledge of LabVIEW as applied to data acquisition programming. Knowledge of flight hardware assembly techniques is desirable.
<b>Instrument Technician II</b>	Provides support to the assembly, testing, maintenance, troubleshooting and operations of instrumentation for various platforms developed or maintained under the scope of the Contract. Responsible for the maintenance of trailers used in field missions; May have responsibility for the maintenance of Class 10,000 clean room. Operations of instrumentation may be at GSFC or in the field.	High school diploma, plus further appropriate education in a trade school and/or extension courses.	10 years of experience. Requires proficiency in one or more of the following areas: electronics, simple machining, mechanical drawing. Training in assembly and maintenance of flight electronics is desirable.
<b>Instrument Technician</b>	Provides support to the assembly, testing, maintenance, troubleshooting and operations of instrumentation developed under the scope of the Contract.	High school diploma, plus further appropriate education in a trade school and/or extension courses.	5 years of experience. Requires familiarity in one of the following areas: electronics, simple machining, understanding of assembly drawings

**EXHIBIT 14 Government Labor Category Descriptions**  
**NNG13454034R**

<b>Machinist</b>	The Machinist shall fabricate mechanical and/or opto-mechanical parts per detailed drawings for instruments to be deployed in orbital, sub-orbital platforms, and ground based applications. The Machinist shall assist in the final assembly of the designed system or sub-system. The Machinist shall operate with proficiency the following machines and sheet metal equipment: vertical and horizontal milling machines; jig bores; engine and tool room lathes; brakes; surface and cylindrical grinders; drill presses; and band saws. The Machinist shall read drawings for product specifications such as dimensions, tolerances, and tooling instructions.	High school diploma, plus further appropriate education in a trade school and/or extension courses.	Must have a minimum of five years experience as a machinist
<b>Technical/Research Assistant</b>	Aids in the preparation of scientific results for presentation at scientific meetings and workshops, and in peer-reviewed scientific journals. Provides planning, development and implementation support for field missions; provides document support for scientific reports and assessments.	B.S. degree, or equivalent***, in a physical science.	10 years experience. Highly proficient with Microsoft Office (Excel, Powerpoint, Word etc.) Excellent planning skills and oral and written communication.
<b>Technical/Research Assistant</b>	Aids in the preparation of scientific results for presentation at scientific meetings and workshops, in Laboratory reports, and in peer-reviewed scientific journals.	B.S. degree, or equivalent***, in a physical science.	5 years experience. knowledge and facility with Microsoft Office (Excel, Powerpoint, Word etc.). Good communication skills
<b>Operations Analyst III</b>	Provides technical leadership for the operational production of science products. Develops, implements, documents and maintains procedures for the operation and monitoring of the data system system which produces the science products. Develops, implements, documents and maintains procedures to correct and prevent problems during operations. Develops, implements and maintains Web-based documents describing system status and performance. Reports on system anomalies for evaluation of impact on scientific quality of data products. Directs and oversees the Contractor operations staff.	Bachelor's degree or equivalent ***	Ten years of operations analyst experience, including five in a leadership role; good time management, organizational and communication skills. UNIX operating system experience, experience with Python, Perl and/or shell scripting, and familiarity with batch processing via queueing software are highly desirable.
<b>Operations Analyst II</b>	Operates and monitors the data processing system to meet requirements for the production of global or regional science products. Identifies and corrects minor production anomalies, and assists in the implementation of patches for serious error conditions. Performs operational maintenance tasks, tracks resource utilization and contributes to system logs and status reports.	Bachelor's degree or equivalent ***	5 years of operations analyst experience; good oral and written communication skills. UNIX operating system experience, flexibility under deadline pressure, and the ability to do shift work, including weekends. Familiarity with Python, Perl and/or shell scripts are highly desirable.

<b>Operations Analyst I</b>	Operates and monitors the data processing system to meet requirements for the production of global or regional science products. Identifies and corrects minor production anomalies, and assists in the implementation of patches for serious error conditions. Performs operational maintenance tasks, tracks resource utilization and contributes to system logs and status reports.	Bachelor's degree or equivalent ***	2 years of operations analyst experience; good oral and written communication skills. Experience with data processing activities, UNIX operating system experience, flexibility under deadline pressure, and the ability to do shift work, including weekends. Experience with scientific data processing activities in a real-time environment, familiarity with UNIX shell scripts, and knowledge of HTML and HTML editors, are highly desirable.
<b>Administrative Assistant III</b>	Performs administrative support for Laboratories, Offices or Projects. Administrative support activities include: preparing travel orders; assisting in the assembly and editing of proposals, reports and journal articles; property management; assisting with safety inspections; ordering supplies; arranging meetings and taking notes at meetings; submitting requests in the eMODS system for phones, keys, furniture and modifications to space; and preparing routing packages for material being published in books or journals which includes submitting eDAA requests.	High school diploma, Associate of Arts degree	12 years experience. Proficiency with Microsoft Office (Excel, Powerpoint, Word etc.) in preparing reports and presentations as well as tracking budgets in spreadsheets. If task includes property management, experience using the NEMS (NASA Equipment Management System) is required. Proficiency with: NASA's travel management and Document Availability Authorization processes, the eMOD (electronic Management Operations Directorate system) software for submitting and tracking work requests and preparing requests to authorize access to the Center or NASA IT resources through the idMAX system. Excellent communication and organizational skills are required.
<b>Administrative Assistant II</b>	Performs administrative support for Laboratories, Offices or Projects. Administrative support activities include: preparing travel orders; assisting in the assembly and editing of proposals, reports and journal articles; may assist with property management activities; may assist with safety inspections; ordering supplies; arranging meetings and taking notes at meetings; submitting requests in the eMODS system for phones, keys, furniture and modifications to space; and preparing routing packages for material being published in books or journals which includes submitting eDAA requests.	High school diploma, Associate of Arts degree	7 years experience. Experience using Microsoft Office (Excel, Powerpoint, Word) for the preparation of documents and presentations and tracking resources or action items is required. Experience preparing presentations and reports. Experience preparing travel packages and tracking them in the NASA system. Experience preparing materials that accompany the submission of papers to refereed journals or conference proceedings. Experience preparing requests to authorize access to the Center or NASA IT resources through the idMAX system. Good communication and organizational skills are required.
<b>Administrative Assistant I</b>	Performs administrative support for Laboratories, Offices or Projects. Administrative support activities include: preparing travel orders; assisting in the assembly and editing of proposals, reports and journal articles; may assist with safety inspections; ordering supplies; arranging meetings and taking notes at meetings; submitting requests in the eMODS system for phones, keys, furniture and modifications to space; and preparing routing packages for material being published in books or journals which includes submitting eDAA requests.	High school diploma, Associate of Arts degree	Basic knowledge of word processing and the use of spreadsheets to track resources or action items is required. Experience using the Microsoft Office suite (Excel, Powerpoint and Word) is desirable. Good communication and organizational skills are required.

**EXHIBIT 14 Government Labor Category Descriptions**  
**NNG13454034R**

<b>Business Analyst II</b>	Supports civil service managers and/or resource analysts in their management of funds within a funded program, project or organization. This entails working with civil servants to develop materials (budget, basis of estimates, phasing plans) for annual PPBE (Planning, Programming, Budgeting and Execution) and workforce exercises; tracking funds received, funds obligated and expended and preparing monthly summaries and projections for civil service managers; replanning budgets as required to respond to changes in an overall program funding levels; pushes funds down to individual WBS elements in a funded program in Funds Control and monitoring labor charges on WBS's to ensure that charges are consistent with planned labor requested on SOWs from projects and/or planned manpower, and makes adjustments when needed. May manage the work of a mentor more junior business analyst(s).	Bachelor's degree or equivalent ***	7 years experience of business analysis experience with at least 3 years experience with financial systems at NASA. Proficiency with SAP Business Warehouse (BW) and Core Financial/R3, Funds Control, and the Microsoft Office Suite (Word and Excel) is required.
<b>Business Analyst I</b>	Performs the following activities in support of a Laboratory or Project: runs reports on the status of funding and manpower obligations and costs, and prepares workbooks showing those commitment, obligations, costs, and available balances, as a part of this function routinely monitors unliquidated obligations and costs Prepares packages for incoming reimbursable funding and tracks the execution of those funds through closeout. Initiates procurement requests and tracks purchase orders for cost and delivery information.	Bachelor's degree or equivalent ***	Experience using a system that provides reports on financial and/or manpower for an organization is required. Knowledge of SAP Business Warehouse (BW) and Core Financial/R3 is desirable. Experience using the Microsoft Office Suite (Word and Excel) is required.
<b>Education and Public Outreach Coordinator IV</b>	Works closely with NASA and Contractor staff to provide leadership in the preparation and publication of documents to promote HSB products and scientific results to agency program managers as well as the general public. Plans, coordinates and participates in the preparation and production of clear, engaging educational and scientific outreach materials, including brochures, reports, Web-based publications and presentations, suitable for students and lay persons.	B.S. degree, or equivalent***, in a physical science or education	15 years of experience in education and public outreach; excellent written and oral communication skills. Knowledge of atmospheric science, oceanography or other Earth science discipline, and broad understanding of Earth system science. Extensive experience in Microsoft Office (Word, Excel, Powerpoint) and in computer-aided graphics and Web development tools such as the Adobe Creative Suite (Photoshop, Illustrator, Dreamweaver, In Design, Acrobat).
<b>Education and Public Outreach Coordinator III</b>	Works closely with NASA and Contractor staff in the preparation and publication of documents to promote HSB products and scientific results to agency program managers as well as the general public. Prepares clear, engaging educational and scientific outreach materials, including brochures, reports, Web-based publications and presentations, suitable for students and lay persons.	B.S. degree, or equivalent***, in a physical science or education	10 years of experience in education and public outreach; excellent written and oral communication skills. Broad understanding of Earth system science. Extensive experience in Microsoft Office (Word, Excel, Powerpoint) and in computer-aided graphics and Web development tools such as the Adobe Creative Suite (Photoshop, Illustrator, Dreamweaver, In Design, Acrobat). Knowledge of atmospheric science, oceanography or other Earth science discipline is highly desirable.

<b>Education and Public Outreach Coordinator II</b>	Supports the preparation of documents and presentations to promote HSB products and scientific results to agency program managers as well as the general public. Prepares clear, engaging educational and scientific outreach materials, including brochures, reports and Web-based publications suitable for students and lay persons.	B.S. degree, or equivalent***, in a physical science or education	5 years of experience in education and public outreach; excellent written and oral communication skills. Proficiency in Microsoft Office (Word, Excel, Powerpoint) and in computer-aided graphics and Web development tools such as the Adobe Creative Suite (Photoshop, Illustrator, Dreamweaver, In Design, Acrobat). Broad understanding of Earth system science is highly desirable.
<b>Education and Public Outreach Coordinator I</b>	Supports the preparation of educational and scientific outreach materials, including brochures, reports and Web-based publications suitable for students and lay persons.	B.S. degree, or equivalent***, in a physical science or education	Excellent written and oral communication skills. Proficiency in Microsoft Office (Word, Excel, Powerpoint). Knowledge of computer-aided graphics and Web development tools such as the Adobe Creative Suite (Photoshop, Illustrator, Dreamweaver, In Design, Acrobat), and academic background in Earth science, are highly desirable.

\* - M.S. Degree in a physical science, atmospheric science, computer science, mathematics, physics or meteorology plus six years of experience in a relevant science. This experience is in addition to the experience required for the position level.

\*\* - B.S. Degree in a physical science, atmospheric science, mathematics, physics or computer science plus three years of experience in a relevant science or computer science position. This experience is in addition to the experience required for the position level.

\*\*\* - High school diploma plus four years of experience in a relevant position. This can include courses at a College, University, or Community College; may also include military training and experience. This experience is in addition to the experience required for the position level.